## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appellant:	Gerd Breiter, et al.	
Serial No.:	10/562,504	) Before the Board of Appeals
Filed:	July 10, 2006	) Appeal No.
FOR:	METHOD AND SYSTEM FOR AUT	) ΓOMATICALLY TRANSFORMN

G PROVIDER OFFERING INTO A CUSTOMER SPECIFIC SERVICE A

ENVIRONMENT DEFINITION EXECUTABLE BY RESOURCE

MANAGEMENT SYSTEMS

## **APPEAL BRIEF**

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

This Appeal Brief is submitted in response to a Final Office Action mailed on November 26, 2010, and Notice of Appeal filed on February 28, 2011. An Amendment After Final pursuant to 37 CFR § 1.116 is also filed herewith.

#### THE REAL PARTY IN INTEREST

The real party in interest in this appeal is International Business Machines, Inc. Ownership by International Business Machines, Inc. is established by assignment document recorded for this application on June 20, 2006 on Reel 017900, Frame 0060.

## RELATED APPEALS AND INTERFERENCES

Appellant knows of no related patent applications or patents under appeal or interference proceeding.

#### STATUS OF CLAIMS

Claims 1-15 are pending. Claims 1 and 8 have been rejected under 35 U.S.C. §112, first paragraph, as allegedly failing to comply with the written description requirement. Claims 1-15 have been rejected under 35 U.S.C. §103(a). The rejections of Claims 1-15 under 35 U.S.C. §112 and 35 U.S.C. 103(a) are at issue and are herein appealed.

## STATUS OF AMENDMENTS

An After Final Amendment is filed concurrently herewith. The Amendment corrects minor typographical errors and is non-substantive in nature. Entry of this Amendment is respectfully requested, as it clearly puts the application in better condition for the present appeal.

#### SUMMARY OF CLAIMED SUBJECT MATTER

A concise explanation of the subject matter defined in each of the independent Claims 1, 8, and 14 involved in the appeal is provided below:

## Claim 1

Claim 1 recites "[a] method for automatically transforming a provider offering describing a

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customer specific service environment in business terms into a form which is automatically executable by a resource management system" (FIG. 3.)

The method further comprises "receiving a description of a provider offering in business terms without any references to specific resources, said provider offering being distinct from a resource catalog, wherein said provider offering is input into a transformation component" (Paragraph [0039] states "The offering describes the service environment exclusively in business terms without any references to specific resources. For the example, the following categories are defined in the resource catalog." In addition, paragraph [0023] states "The provider offering 110 and information from the Resource Catalog 112 are used as input for the Transformation component 115.")

The method additionally comprises "providing access to the resource catalog containing descriptions of all available resource types including information about dependencies of said resource types belonging to said customer specific service environment as well as reference information to execute resource management actions for said resource types" (Paragraph [0036] states "the method looks up this resource type in the resource catalog." In addition, paragraph [0024] states "The resource catalog 112 itself contains individual descriptions for all resource types which are available in the Service Provider's infrastructure." In addition, paragraph [0038] states "Each leaf in the tree represents a certain base resource type. Up to this step in the processing no individual resources have been selected, only the resource type of the required resources has been determined. Furthermore, the topology of the tree also represents the relations between later chosen resources of certain type." Furthermore, paragraph [0037] states "he recursion ends, if a base resource type is referenced which is not further expandable. In this case the node is a leaf node in the tree 700 - 800. It represents a specific base resource which has to be managed in the customer specific service environment implementing the offering." In addition, paragraph [0050] states "These resource management actions which are provided by a resource management actions catalog are a collection of items of following types.")

The method further comprises "wherein said resource catalog is input into the transformation component" (Paragraph [0023] states "The provider offering 110 and information from the Resource Catalog 112 are used as input for the Transformation component 115.")

The method additionally comprises "mapping said description of said provider offering with said resource type information contained in said resource catalog and generating by the transformation component a customer specific service environment topology tree" (The mapping process is described in FIG. 3. In addition, paragraph [0035] states "The inventive method takes a service provider offering as input and builds a resource type topology tree 100 – 200." Furthermore, paragraph [0038] states "After the transformation process has finished, the customer specific service environment topology tree has been build 900.")

The method additionally comprising "using said provider offering by the transformation component as a root node of a customer specific service environment topology tree to be generated, wherein said provider offering is distinct from said resource catalog" (Paragraph [0034] states "After the transformation process has finished, the customer specific service environment topology tree has been [built] 900." In addition, paragraph [0035] states "[the] Root of the topology tree is the offering itself")

The method further comprising "adding identified resource types as nodes in said topology tree which are mapping with said provider offering" (Addition of resource types as nodes is described in FIG. 3, reference 700.)

The method additionally comprising "adding child nodes to said identified nodes when said identified resource types, which are aggregated resource types, map into a set of lower level resource types which are child resources" (Paragraph [0036] states "the starting node of the service environment gets expanded in one or more expanded child nodes 600.")

The method further comprising "repeating the previous steps until said resource types cannot be mapped into set of lower resource types which are base resource types" (Paragraph [0037] states "The recursion ends, if a base resource type is referenced which is not further expandable.")

The method additionally comprises "providing access to a resource management action catalog containing resource management actions each describing how to manage a single resource type by a resource control system" (Paragraph [0050] states "These resource management actions which are provided by a resource management actions catalog are a collection of items of following types.")

The method further comprises "traversing said customer specific service environment topology tree, wherein each node in said customer specific service environment topology tree represents a resource type" (Paragraph [0061] states "traverses the customer specific service environment resource topology." In addition, paragraph [0035] states "a service provider offering as input and builds a resource type topology tree.")

The method additionally comprising "extracting from said resource management action catalog all resource management actions of said resource types identified in said customer specific service environment resource topology tree" (Paragraph [0062] states "resource management actions provide common interfaces 250 that can be used to extract the description and interfaces of the tasks which are later used at runtime for management of the resources in the resource management system.")

The method additionally comprises "sequencing said extracted resource management actions according to requirements of said defined customer specific service environment" (Paragraph [0062] states "The sequence of the tasks in the result task is determined by the parameter maps, i.e. a subtask which requires a certain parameter P as input, must be sequenced after the subtask which provides this parameter P as output 550.")

The method further comprising "compiling said sequenced management actions into a machine readable form executable by said resource management system" (Paragraphs [0064]-[0065] state "The compilation step will generate certain additional tasks to increase or decrease the number of members in such a group. E.g. the example of FIG. 5 uses a 'SET OF SERVLET WEBSERVER', the creation task will honor the given attribute for 'initial' number of elements. In addition the compilation will assemble the tasks for adding and removing a member to or from the group. These additional tasks are executed by the resource control system if the given decision logic evaluates to request additional resources or release unused resources.")

#### Claim 8

Claim 8 recites "[a] system for transforming a provider offering describing a customer specific service environment in business terms into a form executable by a resource management system" (A system for transforming a provider offering is described in FIG. 1, which includes a logical diagram of a

plurality of service provider and resource management components.)

The system comprising "a transformation component for generating a customer specific service environment topology tree" (Paragraph [0023] states "The output of this Transformation component 115 is a customer specific service environment topology 120." In addition, paragraph [0038] recites "After the transformation process has finished, the customer specific service environment topology tree has been [built] 900.")

The system also comprising "receiving a description of a provider offering in business terms without any references to specific resources, said provider offering being distinct from a resource catalog, wherein said provider offering is input into the transformation component" (Paragraph [0039] states "The offering describes the service environment exclusively in business terms without any references to specific resources. For the example, the following categories are defined in the resource catalog." In addition, paragraph [0023] states "The provider offering 110 and information from the Resource Catalog 112 are used as input for the Transformation component 115.")

The system further comprising "providing access to said resource catalog containing descriptions of all available resource types including information about dependencies of said resource types belonging to said customer specific service environment as well as reference information to execute resource management actions for said resource types" (Paragraph [0036] states "the method looks up this resource type in the resource catalog." In addition, paragraph [0024] states "The resource catalog 112 itself contains individual descriptions for all resource types which are available in the Service Provider's infrastructure." In addition, paragraph [0038] states "Each leaf in the tree represents a certain base resource type. Up to this step in the processing no individual resources have been selected, only the resource type of the required resources has been determined. Furthermore, the topology of the tree also represents the relations between later chosen resources of certain type." Furthermore, paragraph [0037] states "he recursion ends, if a base resource type is referenced which is not further expandable. In this case the node is a leaf node in the tree 700 - 800. It represents a specific base resource which has to be managed in the customer specific service environment implementing the offering." In addition, paragraph [0050] states "These resource management actions which are provided by a resource management actions catalog are a collection of items of following types.")

The system further comprising "wherein said resource catalog is input into the transformation component" (Paragraph [0023] states "The provider offering 110 and information from the Resource Catalog 112 are used as input for the Transformation component 115.")

The system further comprising "mapping said description of said provider offering with said resource type information contained in said resource catalog and generating a customer specific service environment topology tree by" (The mapping process is described in FIG. 3. In addition, paragraph [0035] states "The inventive method takes a service provider offering as input and builds a resource type topology tree 100 - 200." Furthermore, paragraph [0038] states "After the transformation process has finished, the customer specific service environment topology tree has been build 900.")

The system further comprising "using said provider offering as root node of a customer specific service environment topology tree to be generated" (Paragraph [0034] states "After the transformation process has finished, the customer specific service environment topology tree has been [built] 900." In addition, paragraph [0035] states "[the] Root of the topology tree is the offering itself")

The system further comprising "adding identified resource types as nodes in said topology tree which are mapping with said provider offering" (Addition of resource types as nodes is described in FIG. 3, reference 700.)

The system further comprising "adding child nodes to said identified nodes when said identified resource types which are aggregated resource types map into a set of lower level resource types which are child resources" (Paragraph [0036] states "the starting node of the service environment gets expanded in one or more expanded child nodes 600.")

The system further comprising "repeating the previous steps until said resource types cannot be mapped into set of lower resource types which are base resource types" (Paragraph [0037] states "The recursion ends, if a base resource type is referenced which is not further expandable.")

The system additionally comprises "a compilation component for generating a customer specific service environment definition" (Paragraph [0023] states "he final output of the Compilation component is a customer specific service environment definition.")

The system further comprises "providing access to a resource management action catalog containing resource management actions each describing how to manage a single resource type by a resource control system" (Paragraph [0050] states "These resource management actions which are provided by a resource management actions catalog are a collection of items of following types.")

The system further comprises "traversing said customer specific service environment topology tree, wherein each node in said customer specific service environment topology tree represents a resource type" (Paragraph [0061] states "traverses the customer specific service environment resource topology." In addition, paragraph [0035] states "a service provider offering as input and builds a resource type topology tree.")

The system additionally comprises "extracting from said resource management action catalog resource management actions of said resource types identified in said customer specific service environment resource topology tree" (Paragraph [0062] states "resource management actions provide common interfaces 250 that can be used to extract the description and interfaces of the tasks which are later used at runtime for management of the resources in the resource management system.")

The system further comprises "sequencing said extracted resource management actions according to requirements of said defined customer specific service environment" (Paragraph [0062] states "The sequence of the tasks in the result task is determined by the parameter maps, i.e. a subtask which requires a certain parameter P as input, must be sequenced after the subtask which provides this parameter P as output 550.")

The system additionally comprises "compiling said sequenced resource management actions into a machine readable form executable by said resource management system." (Paragraphs [0064]-[0065] state "The compilation step will generate certain additional tasks to increase or decrease the number of members in such a group. E.g. the example of FIG. 5 uses a 'SET OF SERVLET WEBSERVER', the creation task will honor the given attribute for 'initial' number of elements. In addition the compilation will assemble the tasks for adding and removing a member to or from the group. These additional tasks are executed by the resource control system if the given decision logic evaluates to request additional resources or release unused resources.")

The above exemplary embodiments are discussed with respect to the aforementioned independent Claims by way of example only and are not intended to in any way limit the scope of DE920020043US1 8

these Claims.

### Claim 15

Claim 15 recites "[a] computer program product stored in the internal memory of a digital computer, containing parts of software code" (Paragraph [0020] states "The inventive components may be preferably implemented in a client-server architecture in which the customer uses a client system 150 with an operating system like Microsoft Windows, and Internet Browser like Netscape, and the service provider uses a server system 100 like IBM pSeries with an operating system like IBM AIX, an application server like IBM WebSphere Application Server, and a Web server." In addition, see Claim 15 as originally filed.)

The software code executes a method comprising "receiving a description of a provider offering in business terms without any references to specific resources, said provider offering being distinct from a resource catalog, wherein said provider offering is input into a transformation component" (Paragraph [0039] states "The offering describes the service environment exclusively in business terms without any references to specific resources. For the example, the following categories are defined in the resource catalog." In addition, paragraph [0023] states "The provider offering 110 and information from the Resource Catalog 112 are used as input for the Transformation component 115.")

The method additionally comprises "providing access to the resource catalog containing descriptions of all available resource types including information about dependencies of said resource types belonging to said customer specific service environment as well as reference information to execute resource management actions for said resource types" (Paragraph [0036] states "the method looks up this resource type in the resource catalog." In addition, paragraph [0024] states "The resource catalog 112 itself contains individual descriptions for all resource types which are available in the Service Provider's infrastructure." In addition, paragraph [0038] states "Each leaf in the tree represents a certain base resource type. Up to this step in the processing no individual resources have been selected, only the resource type of the required resources has been determined. Furthermore, the topology of the tree also represents the relations between later chosen resources of certain type." Furthermore, paragraph [0037] states "he recursion ends, if a base resource type is referenced which is not further expandable. In this case the node is a leaf node in the tree 700 - 800. It represents a specific base resource which has to be managed in the customer specific service environment DE920020043US1

implementing the offering." In addition, paragraph [0050] states "These resource management actions which are provided by a resource management actions catalog are a collection of items of following types.")

The method further comprises "wherein said resource catalog is input into the transformation component" (Paragraph [0023] states "The provider offering 110 and information from the Resource Catalog 112 are used as input for the Transformation component 115.")

The method additionally comprises "mapping said description of said provider offering with said resource type information contained in said resource catalog and generating by the transformation component a customer specific service environment topology tree" (The mapping process is described in FIG. 3. In addition, paragraph [0035] states "The inventive method takes a service provider offering as input and builds a resource type topology tree 100 – 200." Furthermore, paragraph [0038] states "After the transformation process has finished, the customer specific service environment topology tree has been build 900.")

The method additionally comprising "using said provider offering by the transformation component as a root node of a customer specific service environment topology tree to be generated, wherein said provider offering is distinct from said resource catalog" (Paragraph [0034] states "After the transformation process has finished, the customer specific service environment topology tree has been [built] 900." In addition, paragraph [0035] states "[the] Root of the topology tree is the offering itself")

The method further comprising "adding identified resource types as nodes in said topology tree which are mapping with said provider offering" (Addition of resource types as nodes is described in FIG. 3, reference 700.)

The method additionally comprising "adding child nodes to said identified nodes when said identified resource types, which are aggregated resource types, map into a set of lower level resource types which are child resources" (Paragraph [0036] states "the starting node of the service environment gets expanded in one or more expanded child nodes 600.")

The method further comprising "repeating the previous steps until said resource types cannot be mapped into set of lower resource types which are base resource types" (Paragraph [0037] states "The recursion ends, if a base resource type is referenced which is not further expandable.")

The method additionally comprises "providing access to a resource management action catalog containing resource management actions each describing how to manage a single resource type by a resource control system" (Paragraph [0050] states "These resource management actions which are provided by a resource management actions catalog are a collection of items of following types.")

The method further comprises "traversing said customer specific service environment topology tree, wherein each node in said customer specific service environment topology tree represents a resource type" (Paragraph [0061] states "traverses the customer specific service environment resource topology." In addition, paragraph [0035] states "a service provider offering as input and builds a resource type topology tree.")

The method additionally comprising "extracting from said resource management action catalog all resource management actions of said resource types identified in said customer specific service environment resource topology tree" (Paragraph [0062] states "resource management actions provide common interfaces 250 that can be used to extract the description and interfaces of the tasks which are later used at runtime for management of the resources in the resource management system.")

The method additionally comprises "sequencing said extracted resource management actions according to requirements of said defined customer specific service environment" (Paragraph [0062] states "The sequence of the tasks in the result task is determined by the parameter maps, i.e. a subtask which requires a certain parameter P as input, must be sequenced after the subtask which provides this parameter P as output 550.")

The method further comprising "compiling said sequenced management actions into a machine readable form executable by said resource management system" (Paragraphs [0064]-[0065] state "The compilation step will generate certain additional tasks to increase or decrease the number of members in such a group. E.g. the example of FIG. 5 uses a 'SET OF SERVLET WEBSERVER', the creation task will honor the given attribute for 'initial' number of elements.

In addition the compilation will assemble the tasks for adding and removing a member to or from the group. These additional tasks are executed by the resource control system if the given decision logic evaluates to request additional resources or release unused resources.")

#### GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Claims 1 and 8 have been rejected under 35 U.S.C. §112 first paragraph, as allegedly failing to comply with the written description requirement. The rejection of Claims 1 and 8 for allegedly failing to comply with the written description requirement is to be reviewed on appeal.

In addition, Claims 1-15 have been rejected under 35 U.S.C. §103(a) as being allegedly unpatentable over U.S. Patent Publication No. 2002/0107761 to Kark et al. (hereinafter "Kark") in view of U.S. Patent Publication No. 2002/0059090 to Yanagimachi et al. (hereinafter "Yanagimachi"). The rejection of Claims 1-15 as being allegedly unpatentable over Kark in view of Yanagimachi is to be reviewed on appeal.

## **ARGUMENT**

#### Rejections 35 U.S.C. §112 First Paragraph

With regard to Claim 1, the Examiner alleges that the element "said provider offering being distinct from a resource catalog" fails to comply with the written description requirement. The Appellant respectfully disagrees.

Paragraph [0039] of the Specification as published recites *inter alia* "The offering describes the service environment exclusively in business terms without any references to specific resources." In addition, FIG. 1 clearly shows the provider offering (reference 110) and the resource catalog (reference 112) as distinct inputs to the transformation component (reference 115.) ("The provider offering 110 *and* information from the Resource Catalog 112 are used as input for the Transformation component 115," Para. [0023], emphasis added.) Furthermore, the functional descriptions of the provider offering and the resource catalog are different. Whereas the provider offering describes a "customer specific service environment...exclusively in business terms without any references to specific resources" (Para. [0039]), the resource catalog "contains categorized aggregated *resource types*, which provide several abstraction levels within the resource catalog." (Para. [0027], emphasis added).

Therefore, for at least these reasons, the element "said provider offering being distinct from a resource catalog" clearly complies with the written description requirement. The Appellant respectfully requests reconsideration and withdrawal of the rejection of Claim 1.

With regard to Claim 8, the Examiner alleges that the element "said provider offering being distinct from a resource catalog" fails to comply with the written description requirement. The Appellant respectfully disagrees.

Paragraph [0039] of the Specification as published recites *inter alia* "The offering describes the service environment exclusively in business terms without any references to specific resources." In addition, FIG. 1 clearly shows the provider offering (reference 110) and the resource catalog (reference 112) as distinct inputs to the transformation component (reference 115.) ("The provider offering 110 *and* information from the Resource Catalog 112 are used as input for the Transformation component 115," Para. [0023], emphasis added.) Furthermore, the functional descriptions of the provider offering and the resource catalog are different. Whereas the provider offering describes a "customer specific service environment...exclusively in business terms without any references to specific resources" (Para. [0039]), the resource catalog "contains categorized aggregated *resource types*, which provide several abstraction levels within the resource catalog." (Para. [0027], emphasis added).

Therefore, for at least these reasons, the element "said provider offering being distinct from a resource catalog" clearly complies with the written description requirement. The Appellant respectfully requests reconsideration and withdrawal of the rejection of Claim 8.

## Rejections under 35 U.S.C. §103(a)

Claims 1-15 have been rejected under 35 U.S.C. §103(a) as being allegedly unpatentable over U.S. Patent Publication 2002/0107761 to Kark (hereinafter "Kark") in view of U.S. Patent Publication 2002/0059090 to Yanagimachi, (hereinafter "Yanagimachi.")

With regard to Claim 1, the Examiner alleges that Kark teaches "said provider offering

being distinct from a resource catalog, wherein said provider offering is input into a transformation component." The Examiner alleges that the product update process of Kark teaches "said provider offering being distinct from a resource catalog." (Office Action, pgs. 5-6.) Kark discloses the production of one or more channel partner catalogs created by selecting one or more items from an industry product catalog, which in turn is generated by selecting a plurality of products from the merging of one or more manufacturer catalogs. ("The system comprises a plurality of manufacturer catalogs, each manufacturer catalog including information regarding products provided by a corresponding manufacturer; an industry catalog generated from selected information received from the manufacturer catalogs; and a plurality of channel partner catalogs generated from selected information received from the industry catalog," Kark, Para. [0053], emphasis added.) Kark discloses that each of the catalogs is made up of product information selected directly from the parent catalogs, and therefore does not teach or suggest "said provider offering being distinct from a resource catalog," as recited inter alia in Claim 1. ("One method includes the steps of: providing an industry master catalog having an aggregation of a plurality of manufacturer catalogs including information regarding products or services available from a corresponding manufacturer; and selectively copying portions of the industry master catalog to a plurality of channel partner catalogs, each representing goods or services of a manufacturer available from a corresponding channel partner," Kark, Para. [0053], emphasis added; see also "These levels are preferably created as *copies* of a catalog from the level above. That is, the partner level catalogs are preferably created as copies of the industry master catalog, the reseller location catalogs are preferably created as copies of a partner catalog, and so on. Using this copy method, the system is able to maintain the parent-child relationship based on a catalog id," Kark, Para. [0047], emphasis added.) Therefore, Kark clearly discloses that each of the catalogs, from parent to child contains a copy of information directly related to the "products or services" provided and does not teach or suggest "said provider offering being distinct from a resource catalog," as recited inter alia in Claim 1. The addition of Yanagimachi does not correct the deficiencies of Kark.

In addition, with regard to Claim 1, the Examiner alleges that Kark teaches "providing access to the resource catalog containing descriptions of all available resource *types including information about dependencies* of said resource types belonging to said customer specific DE920020043US1

service environment as well as reference information to execute resource management actions for said resource types." Kark discloses the ability to filter what parts of a catalog are presented to users based on a number of factors, however the filtering of Kark does not teach or suggest "providing access to the resource catalog containing descriptions of all available resource types including information about dependencies of said resource types... as well as reference information to execute resource management actions for said resource types," as recited inter alia in Claim 1. ("filtering of presentation of a catalog information based upon factors such as the particular portal used to enter the catalog or based upon other criteria of the viewer of the catalog," Kark, Para. [0051], emphasis added.) Kark is devoid of teaching or suggesting "providing access to the resource catalog containing descriptions of all available resource types including information about dependencies of said resource types... as well as reference information to execute resource management actions for said resource types," as recited inter alia in Claim 1. The addition of Yanagimachi does not correct the deficiencies of Kark.

In addition, with regard to Claim 1, the Examiner alleges that Kark teaches "using said provider offering by the transformation component as a root node of a customer specific service environment topology tree to be generated, wherein said provider offering is distinct from said resource catalog." The combination of Kark and Yanagimachi, however, is devoid of teaching or suggesting "using said provider offering by the transformation component as a <u>root node</u> of a <u>customer specific service environment topology tree</u>," as recited <u>inter alia</u> in Claim 1.

Furthermore, for at least the reason that the combination of Kark and Yanagimachi are devoid of teaching or suggesting "a customer specific service environment topology tree," as stated above, the combination of Kark and Yanagimachi is devoid of teaching or suggesting "adding identified resource types as nodes in said topology tree which are mapping with said provider offering." The Examiner alleges that the "MAPFROM and MAPTO" fields of Kark "are the equivalent to nodes" as recited inter alia in Claim 1. (Office Action, pg. 7.) Assuming, arguendo, that the "MAPFROM and MAPTO" fields of Kark are equivalent to "nodes," as recited inter alia in Claim 1, which they are not, Kark discloses that the "MAPFROM and MAPTO" fields contain values that relate one product to another, and is devoid of teaching or suggesting "adding identified resource types as nodes in said topology tree which are mapping

with said provider offering," as recited *inter alia* in Claim 1. ("The MAPFROM and MAPTO fields identify specific fields that can associate the product with a related product. In particular, the MAPFROM field indicates a field name used to identify a related product and the MAPTO field indicates the value of the field identified by MAPFROM to be used to identify a related product. For example, MAPFROM <u>could have a value</u> of "SKU" and MAPTO could have a <u>value</u> of "975374" to indicate that the product is related to another product that has an SKU field value of 975374," Kark, Para. [0097], emphasis added.) Therefore Kark does not teach or suggest "adding identified resource types as nodes in said topology tree which are mapping with said provider offering," as recited *inter alia* in Claim 1. The addition of Yanagimachi does not correct the deficiencies of Kark.

In addition, with regard to Claim 1, the Examiner alleges that Kark teaches "adding child nodes to said identified nodes when said identified resource types, which are aggregated resource types, map into a set of lower level resource types which are child resources." As stated above, the Examiner alleges that the "MAPFROM and MAPTO" fields of Kark teach "nodes," as recited *inter alia* in Claim 1. (Office Action, pg. 7.) Assuming, *arguendo*, that the "MAPFROM and MAPTO" fields of Kark teach nodes, which they do not, Kark is devoid of teaching or suggesting "adding *child* nodes to said identified nodes when said identified resource types, which are aggregated resource types, map into a set of lower level resource types which are child resources," as recited *inter alia* in Claim 1. Kark discloses that the "MAPFROM and MAPTO" fields contain *values* that relate one product to another, and is devoid of teaching or suggesting "adding child nodes to said identified nodes when said identified resource types, which are aggregated resource types, map into a set of lower level resource types which are child resources," as recited *inter alia* in Claim 1. (Kark, Para. [0097].) The addition of Yanagimachi does not correct the deficiencies of Kark.

In addition, with regard to Claim 1, the Examiner alleges that Kark teaches "compiling said sequenced management actions into a machine readable form executable by said resource management system." The Examiner alleges that the integration/aggregation steps of Kark are the same as "compiling," as recited *inter alia* in Claim 1. (Office Action, pg. 8.) Even assuming, *arguendo*, that "integration/aggregation" discloses "compiling," which it does not, Kark is devoid

of teaching or suggesting "compiling said sequenced management actions into a machine readable form executable by said resource management system," as recited inter alia in Claim 1. Kark discloses that the process of integration is "integrat[ing] updated information from a parent catalog into a child catalog," which does not teach or suggest "compiling said sequenced management actions into a machine readable form executable by said resource management system," as recited inter alia in Claim 1. (Kark, Para. [0113], emphasis added.) Kark uses the term aggregation in the same way as the term integration is used and, therefore, does not teach or suggest "compiling said sequenced management actions into a machine readable form executable by said resource management system," as recited inter alia in Claim 1. (Kark, Paras. [0017] and [0030].) The combination of Kark and Yanagimachi is devoid of teaching or suggesting "compiling said sequenced management actions into a machine readable form executable by said resource management system," as recited inter alia in Claim 1.

Therefore, for at least these reasons, Claim 1 is allowable over the combination of Kark and Yanagimachi. The Appellant respectfully requests that the rejection of Claim 1 be overturned.

Claims 2-7 depend from Claim 1 and are believed to be allowable for at least the reason that they depend from an allowable base claim.

In addition, with regard to Claim 7, the combination of Kark and Yanagimachi fail to teach or suggest "wherein said reference information includes a URL pointing to a Web Service with the corresponding Web Service description for execution of said resource management actions." Although Kark is directed to electronic commerce, Kark is devoid of teaching or suggesting "wherein said reference information includes a URL pointing to a Web Service with the corresponding Web Service description for execution of said resource management actions." Neither Kark nor Yanagimachi, either alone or in combination, teach or suggest "a Web Service with the corresponding Web Service description for execution of said resource management actions," as recited inter alia in Claim 7. Therefore, for at least that reason, the combination of Kark and Yanagimachi does not teach or suggest "wherein said reference information includes a URL pointing to a Web Service with the corresponding Web Service description for execution of

said resource management actions," as recited *inter alia* in Claim 7. Therefore, for at least these reasons, Claim 7 is allowable over the combination of Kark and Yanagimachi. The Appellant respectfully requests that the rejection of Claim 7 be overturned.

With regard to Claim 8, the Examiner alleges that Kark teaches "said provider offering being distinct from a resource catalog, wherein said provider offering is input into a transformation component." The Examiner alleges that the product update process of Kark teaches "said provider offering being distinct from a resource catalog." (Office Action, pgs. 5-6.) Kark discloses the production of one or more channel partner catalogs created by selecting one or more items from an industry product catalog, which in turn is generated by selecting a plurality of products from the merging of one or more manufacturer catalogs. ("The system comprises a plurality of manufacturer catalogs, each manufacturer catalog including information regarding products provided by a corresponding manufacturer; an industry catalog generated from selected information received from the manufacturer catalogs; and a plurality of channel partner catalogs generated from selected information received from the industry catalog," Kark, Para. [0053], emphasis added.) Kark discloses that each of the catalogs is made up of product information selected directly from the parent catalogs, and therefore does not teach or suggest "said provider offering being distinct from a resource catalog," as recited inter alia in Claim 8. ("One method includes the steps of: providing an industry master catalog having an aggregation of a plurality of manufacturer catalogs including information regarding products or services available from a corresponding manufacturer; and selectively copying portions of the industry master catalog to a plurality of channel partner catalogs, each representing goods or services of a manufacturer available from a corresponding channel partner," Kark, Para. [0053], emphasis added; see also "These levels are preferably created as *copies* of a catalog from the level above. That is, the partner level catalogs are preferably created as copies of the industry master catalog, the reseller location catalogs are preferably created as copies of a partner catalog, and so on. Using this copy method, the system is able to maintain the parent-child relationship based on a catalog id," Kark, Para. [0047], emphasis added.) Therefore, Kark clearly discloses that each of the catalogs, from parent to child contains a copy of information directly related to the "products or services" provided and does not teach or suggest "said provider offering being distinct from a resource catalog," as recited inter alia in Claim 8. The addition of Yanagimachi does not correct the DE920020043US1 19

deficiencies of Kark.

In addition, with regard to Claim 8, the Examiner alleges that Kark teaches "providing access to the resource catalog containing descriptions of all available resource types including information about dependencies of said resource types belonging to said customer specific service environment as well as reference information to execute resource management actions for said resource types." Kark discloses the ability to filter what parts of a catalog are presented to users based on a number of factors, however the filtering of Kark does not teach or suggest "providing access to the resource catalog containing descriptions of all available resource types including information about dependencies of said resource types... as well as reference information to execute resource management actions for said resource types," as recited inter alia in Claim 8. ("filtering of presentation of a catalog information based upon factors such as the particular portal used to enter the catalog or based upon other criteria of the viewer of the catalog," Kark, Para. [0051], emphasis added.) Kark is devoid of teaching or suggesting "providing access to the resource catalog containing descriptions of all available resource types including information about dependencies of said resource types... as well as reference information to execute resource management actions for said resource types," as recited inter alia in Claim 8. The addition of Yanagimachi does not correct the deficiencies of Kark.

In addition, with regard to Claim 8, the Examiner alleges that Kark teaches "using said provider offering as root node of a customer specific service environment topology tree to be generated." The combination of Kark and Yanagimachi, however, is devoid of teaching or suggesting "using said provider offering as *root node* of a customer specific *service environment* topology tree to be generated," as recited *inter alia* in Claim 8.

Furthermore, for at least the reason that the combination of Kark and Yanagimachi are devoid of teaching or suggesting "a customer specific service environment topology tree," as stated above, the combination of Kark and Yanagimachi is devoid of teaching or suggesting "adding identified resource types as nodes in said topology tree which are mapping with said provider offering." The Examiner alleges that the "MAPFROM and MAPTO" fields of Kark "are the equivalent to nodes" as recited *inter alia* in Claim 8. (Office Action, pg. 7.) Assuming,

arguendo, that the "MAPFROM and MAPTO" fields of Kark are equivalent to "nodes," as recited *inter alia* in Claim 8, which they are not, Kark discloses that the "MAPFROM and MAPTO" fields contain values that relate one product to another, and is devoid of teaching or suggesting "adding identified resource types as nodes in said topology tree which are mapping with said provider offering," as recited *inter alia* in Claim 8. ("The MAPFROM and MAPTO fields identify specific fields that can associate the product with a related product. In particular, the MAPFROM field indicates a field name used to identify a related product and the MAPTO field indicates the value of the field identified by MAPFROM to be used to identify a related product. For example, MAPFROM could have a value of "SKU" and MAPTO could have a value of "975374" to indicate that the product is related to another product that has an SKU field value of 975374," Kark, Para. [0097], emphasis added.) Therefore Kark does not teach or suggest "adding identified resource types as nodes in said topology tree which are mapping with said provider offering," as recited *inter alia* in Claim 8. The addition of Yanagimachi does not correct the deficiencies of Kark.

In addition, with regard to Claim 8, the Examiner alleges that Kark teaches "adding child nodes to said identified nodes when said identified resource types, which are aggregated resource types, map into a set of lower level resource types which are child resources." As stated above, the Examiner alleges that the "MAPFROM and MAPTO" fields of Kark teach "nodes," as recited *inter alia* in Claim 8. (Office Action, pg. 7.) Assuming, *arguendo*, that the "MAPFROM and MAPTO" fields of Kark teach nodes, which they do not, Kark is devoid of teaching or suggesting "adding *child* nodes to said identified nodes when said identified resource types, which are aggregated resource types, map into a set of lower level resource types which are child resources," as recited *inter alia* in Claim 8. Kark discloses that the "MAPFROM and MAPTO" fields contain *values* that relate one product to another, and is devoid of teaching or suggesting "adding child nodes to said identified nodes when said identified resource types, which are aggregated resource types, map into a set of lower level resource types which are child resources," as recited *inter alia* in Claim 8. (Kark, Para. [0097].) The addition of Yanagimachi does not correct the deficiencies of Kark.

In addition, with regard to Claim 8, the Examiner alleges that Kark teaches "compiling

said sequenced resource management actions into a machine readable form executable by said resource management system." The Examiner alleges that the integration/aggregation steps of Kark are the same as "compiling," as recited *inter alia* in Claim 8. (Office Action, pg. 8.) Even assuming, arguendo, that "integration/aggregation" discloses "compiling," which it does not, Kark is devoid of teaching or suggesting "compiling said sequenced resource management actions into a machine readable form executable by said resource management," as recited inter alia in Claim 8. Kark discloses that the process of integration is "integrat[ing] updated information from a parent catalog into a child catalog," which does not teach or suggest "compiling said sequenced resource management actions into a machine readable form executable by said resource management," as recited inter alia in Claim 8. (Kark, Para. [0113], emphasis added.) Kark uses the term aggregation in the same way as the term integration is used and, therefore, does not teach or suggest "compiling said sequenced management actions into a machine readable form executable by said resource management system," as recited inter alia in Claim 8. (Kark, Paras. [0017] and [0030].) The combination of Kark and Yanagimachi is devoid of teaching or suggesting "compiling said sequenced management actions into a machine readable form executable by said resource management system," as recited inter alia in Claim 8.

Therefore, for at least these reasons, Claim 8 is allowable over the combination of Kark and Yanagimachi. The Appellant respectfully requests that the rejection of Claim 8 be overturned.

Claims 9-14 depend from Claim 8 and are believed to be allowable for at least the reason that they depend from an allowable base claim.

With regard to Claim 15, the Examiner alleges that Kark teaches "said provider offering being distinct from a resource catalog, wherein said provider offering is input into a transformation component." The Examiner alleges that the product update process of Kark teaches "said provider offering being distinct from a resource catalog." (Office Action, pgs. 5-6.) Kark discloses the production of one or more channel partner catalogs created by selecting one or more items from an industry product catalog, which in turn is generated by selecting a plurality of products from the merging of one or more manufacturer catalogs. ("The system comprises a

plurality of manufacturer catalogs, each manufacturer catalog including information regarding products provided by a corresponding manufacturer; an industry catalog generated from selected information received from the manufacturer catalogs; and a plurality of channel partner catalogs generated from selected information received from the industry catalog," Kark, Para. [0053], emphasis added.) Kark discloses that each of the catalogs is made up of product information selected directly from the parent catalogs, and therefore does not teach or suggest "said provider offering being distinct from a resource catalog," as recited inter alia in Claim 15. ("One method includes the steps of: providing an industry master catalog having an aggregation of a plurality of manufacturer catalogs including information regarding products or services available from a corresponding manufacturer; and selectively copying portions of the industry master catalog to a plurality of channel partner catalogs, each representing goods or services of a manufacturer available from a corresponding channel partner," Kark, Para. [0053], emphasis added; see also "These levels are preferably created as *copies* of a catalog from the level above. That is, the partner level catalogs are preferably created as copies of the industry master catalog, the reseller location catalogs are preferably created as copies of a partner catalog, and so on. Using this copy method, the system is able to maintain the parent-child relationship based on a catalog id," Kark, Para. [0047], emphasis added.) Therefore, Kark clearly discloses that each of the catalogs, from parent to child contains a copy of information directly related to the "products or services" provided and does not teach or suggest "said provider offering being distinct from a resource catalog," as recited inter alia in Claim 15. The addition of Yanagimachi does not correct the deficiencies of Kark.

In addition, with regard to Claim 15, the Examiner alleges that Kark teaches "providing access to the resource catalog containing descriptions of all available resource *types including information about dependencies* of said resource types belonging to said customer specific service environment as well as *reference information to execute resource management actions for said resource types*." Kark discloses the ability to filter what parts of a catalog are presented to users based on a number of factors, however the filtering of Kark does not teach or suggest "providing access to the resource catalog containing descriptions of all available resource types *including information about dependencies* of said resource types... as well as *reference information to execute resource management actions* for said resource types," as recited *inter* DE920020043US1

alia in Claim 15. ("filtering of presentation of a catalog information based upon factors such as the particular portal used to enter the catalog or based upon other criteria of the viewer of the catalog," Kark, Para. [0051], emphasis added.) Kark is devoid of teaching or suggesting "providing access to the resource catalog containing descriptions of all available resource types including information about dependencies of said resource types... as well as reference information to execute resource management actions for said resource types," as recited inter alia in Claim 15. The addition of Yanagimachi does not correct the deficiencies of Kark.

In addition, with regard to Claim 15, the Examiner alleges that Kark teaches "using said provider offering by the transformation component as a root node of a customer specific service environment topology tree to be generated, wherein said provider offering is distinct from said resource catalog." The combination of Kark and Yanagimachi, however, is devoid of teaching or suggesting "using said provider offering by the transformation component as a *root node* of a customer specific *service environment topology tree*," as recited *inter alia* in Claim 15.

Furthermore, for at least the reason that the combination of Kark and Yanagimachi are devoid of teaching or suggesting "a customer specific service environment topology tree," as stated above, the combination of Kark and Yanagimachi is devoid of teaching or suggesting "adding identified resource types as nodes in said topology tree which are mapping with said provider offering." The Examiner alleges that the "MAPFROM and MAPTO" fields of Kark "are the equivalent to nodes" as recited *inter alia* in Claim 15. (Office Action, pg. 7.) Assuming, arguendo, that the "MAPFROM and MAPTO" fields of Kark are equivalent to "nodes," as recited inter alia in Claim 15, which they are not, Kark discloses that the "MAPFROM and MAPTO" fields contain values that relate one product to another, and is devoid of teaching or suggesting "adding identified resource types as nodes in said topology tree which are mapping with said provider offering," as recited inter alia in Claim 15. ("The MAPFROM and MAPTO fields identify specific fields that can associate the product with a related product. In particular, the MAPFROM field indicates a field name used to identify a related product and the MAPTO field indicates the value of the field identified by MAPFROM to be used to identify a related product. For example, MAPFROM could have a value of "SKU" and MAPTO could have a value of "975374" to indicate that the product is related to another product that has an SKU field value

of 975374," Kark, Para. [0097], emphasis added.) Therefore Kark does not teach or suggest "adding identified resource types as nodes in said topology tree which are mapping with said provider offering," as recited *inter alia* in Claim 15. The addition of Yanagimachi does not correct the deficiencies of Kark.

In addition, with regard to Claim 15, the Examiner alleges that Kark teaches "adding child nodes to said identified nodes when said identified resource types, which are aggregated resource types, map into a set of lower level resource types which are child resources." As stated above, the Examiner alleges that the "MAPFROM and MAPTO" fields of Kark teach "nodes," as recited *inter alia* in Claim 15. (Office Action, pg. 7.) Assuming, *arguendo*, that the "MAPFROM and MAPTO" fields of Kark teach nodes, which they do not, Kark is devoid of teaching or suggesting "adding *child* nodes to said identified nodes when said identified resource types, which are aggregated resource types, map into a set of lower level resource types which are child resources," as recited *inter alia* in Claim 15. Kark discloses that the "MAPFROM and MAPTO" fields contain *values* that relate one product to another, and is devoid of teaching or suggesting "*adding child nodes* to said identified nodes when said identified resource types, which are aggregated resource types, map into a set of lower level resource types which are child resources," as recited *inter alia* in Claim 15. (Kark, Para. [0097].) The addition of Yanagimachi does not correct the deficiencies of Kark.

In addition, with regard to Claim 15, the Examiner alleges that Kark teaches "compiling said sequenced management actions into a machine readable form executable by said resource management system." The Examiner alleges that the integration/aggregation steps of Kark are the same as "compiling," as recited *inter alia* in Claim 15. (Office Action, pg. 8.) Even assuming, *arguendo*, that "integration/aggregation" discloses "compiling," which it does not, Kark is devoid of teaching or suggesting "compiling said sequenced management actions <u>into a machine readable form executable</u> by said resource management system," as recited *inter alia* in Claim 15. Kark discloses that the process of integration is "integrat[ing] updated information from a parent catalog into a child catalog," which does not teach or suggest "compiling said sequenced management actions <u>into a machine readable form executable by said resource management system</u>," as recited *inter alia* in Claim 15. (Kark, Para. [0113], emphasis added.)

Kark uses the term aggregation in the same way as the term integration is used and, therefore, does not teach or suggest "compiling said sequenced management actions into a machine readable form executable by said resource management system," as recited inter alia in Claim 15. (Kark, Paras. [0017] and [0030].) The combination of Kark and Yanagimachi is devoid of teaching or suggesting "compiling said sequenced management actions into a machine readable form executable by said resource management system," as recited inter alia in Claim 15.

Therefore, for at least these reasons, Claim 15 is allowable over the combination of Kark and Yanagimachi. The Appellant respectfully requests that the rejection of Claim 15 be overturned.

## **CONCLUSION**

In view of the foregoing, it is urged that the final rejection of Claims 1-15 be overturned. The final rejection is in error and should be reversed. The fee set forth in 37 CFR 41.20(b)(2) is enclosed herewith. If there are any additional charges with respect to this Appeal Brief, or otherwise, please charge them to Deposit Account No. 09-0463.

Respectfully submitted,

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#### **CLAIM APPENDIX**

1. A method for automatically transforming a provider offering describing a customer specific service environment in business terms into a form which is automatically executable by a resource management system, the method comprises the steps of:

receiving a description of a provider offering in business terms without any references to specific resources, said provider offering being distinct from a resource catalog, wherein said provider offering is input into a transformation component;

providing access to the resource catalog containing descriptions of all available resource types including information about dependencies of said resource types belonging to said customer specific service environment as well as reference information to execute resource management actions for said resource types;

wherein said resource catalog is input into the transformation component;

mapping said description of said provider offering with said resource type information contained in said resource catalog and generating by the transformation component a customer specific service environment topology tree comprising the steps of:

using said provider offering by the transformation component as a root node of a customer specific service environment topology tree to be generated, wherein said provider offering is distinct from said resource catalog;

adding identified resource types as nodes in said topology tree which are mapping with said provider offering; and

adding child nodes to said identified nodes when said identified resource types, which are aggregated resource types, map into a set of lower level resource types which are child resources;

repeating the previous steps until said resource types cannot be mapped into set of lower resource types which are base resource types;

providing access to a resource management action catalog containing resource management actions each describing how to manage a single resource type by a resource control system;

traversing said customer specific service environment topology tree, wherein each node in said customer specific service environment topology tree represents a resource type;

extracting from said resource management action catalog all resource management actions of said resource types identified in said customer specific service environment resource topology tree;

sequencing said extracted resource management actions according to requirements of said defined customer specific service environment; and

compiling said sequenced management actions into a machine readable form executable by said resource management system.

- 2. A method according to Claim 1, wherein said resource management actions includes the operations creation, management, and deletion of said resource types.
- 3. A method according to Claim 1, wherein said sequence is defined by input and out parameter of said resource management actions.
- 4. A method according to Claim 1, wherein said sequence is implemented as workflow executable by said resource management system.
- 5. A method according to Claim 1, wherein said resource management actions are used to define a decision logic in form of rules to control the execution of said resource management actions.
- 6. A method according to Claim 5, wherein said defined work flow process or said decision logic is implemented in a form of XML data.
- 7. A method according to 1, wherein said reference information includes a URL pointing to a Web Service with the corresponding Web Service description for execution of said resource management actions.

8. A system for transforming a provider offering describing a customer specific service environment in business terms into a form executable by a resource management system, comprising:

a transformation component for generating a customer specific service environment topology tree by:

receiving a description of a provider offering in business terms without any references to specific resources, said provider offering being distinct from a resource catalog, wherein said provider offering is input into the transformation component;

wherein said resource catalog is input into the transformation component;

providing access to said resource catalog containing descriptions of all available resource types including information about dependencies of said resource types belonging to said customer specific service environment as well as reference information to execute resource management actions for said resource types;

wherein said resource catalog is input into the transformation component;

mapping said description of said provider offering with said resource type information contained in said resource catalog and generating a customer specific service environment topology tree by:

using said provider offering as root node of a customer specific service environment topology tree to be generated;

adding identified resource types as nodes in said topology tree which are mapping with said provider offering;

adding child nodes to said identified nodes when said identified resource types which are aggregated resource types map into a set of lower level resource types which are child resources; and

repeating the previous steps until said resource types cannot be mapped into set of lower resource types which are base resource types;

a compilation component for generating a customer specific service environment definition by:

providing access to a resource management action catalog containing resource management actions each describing how to manage a single resource type by a resource control system;

traversing said customer specific service environment topology tree, wherein each node in said customer specific service environment topology tree represents a resource type;

extracting from said resource management action catalog resource management actions of said resource types identified in said customer specific service environment resource topology tree;

sequencing said extracted resource management actions according to requirements of said defined customer specific service environment; and

compiling said sequenced resource management actions into a machine readable form executable by said resource management system.

- 9. A System according to Claim 8, wherein said resource catalog contains categorized aggregated resource types which contain references to one or more other resources types with other parameters for them or a certain combination of them or both.
- 10. A system according to Claim 8, wherein said provider offering forms the highest aggregation level of aggregated resource types and the base resources form the lowest not further expandable level in said resource catalog, wherein only said base resource types contain reference information to execute resource management actions for said resource types.
- 11. A system according to Claim 8, wherein said resource catalog may be implemented in a form of a table stored in a database, or XML file stored in a file system.
- 12. A system according to Claim 8, wherein said resource management actions includes creation, management, and deletion of said resource types.
- 13. A system according to Claim 8, wherein each resource management action is defined by the name of the resource type, its tasks and its specific input and output parameter.
- 14. A system according to Claim 8, wherein the result of said compilation component is a machinereadable description of sequenced resource management actions as well as decision logic for operating said customer specific service environment.
- 15. A computer program product stored in the internal memory of a digital computer, containing

parts of software code to execute the method in accordance with Claim 1 if the product is run on the computer.

16-20. (Cancelled)

# EVIDENCE APPENDIX

None

# RELATED PROCEEDINGS APPENDIX

None